

### REMARKS

Reexamination and reconsideration in light of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-4, 7, 8, 10, 13, 15, 16, 18, 20-23, 26 and 27 are pending in this application. Claims 5, 6, 9, 11, 12, 14, 17, 19, 24, 25 and 28 have been canceled. No new claims have been added. No new matter has been added to the application. Support for the amendments to the amended claims can be found in Figs. 4 and 5.

Claims 1-16, 18, 20, 20 and 21 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 5, 6, 9, 11, 12 and 14 have been canceled. Therefore, any rejection based on these claims is moot. The Examiner based the rejection on the following grounds:

1. The expression "said reaction area" in claim 1 is "vague and indefinite because applicant recites two or more reaction areas out of said plurality of reaction areas." Claim 1 has been amended to recite that reaction areas are formed so as to entirely cover the reactive layer. It is believed that by this amendment the rejection is overcome.

2. The term "cover" in claim 1 is vague and indefinite because it is "unclear what applicant intends." The claim has been amended to recite that that reaction areas are formed so as to entirely cover the reactive layer. It is believed that by this amendment the rejection is overcome.

3. Claim 1 is vague and indefinite because it is unclear how coloration is achieved. The claim is clear. As pointed out by the Examiner, coloration occurs as the result of a specific reaction between the binding agent and the analyte. However, as explained in the paragraph bridging pages 14 and 15 of the specification, the labeling reagent holding layer contains a labeling reagent that can attach itself to the analyte. The binding reagent is in the reaction area and it reacts

with either the analyte or the labeling reagent attached to the analyte to produce coloration. It is believed that the claims is not indefinite and that a person having ordinary skill in the art having read the specification would have understood how the binding reagent, analyte and labeling reagent interact to produce color. Accordingly, it is respectfully requested that this aspect of the rejection be reconsidered and withdrawn.

4. The term “sheet-like” in claim 3 is vague and indefinite because “-like” is indefinite. By definition, a “sheet-like” means “a surface or part of a surface in which it is possible to pass from any one point of it to any other without leaving the surface” (*Webster's Ninth New Collegiate Dictionary*, Merriam-Webster, p. 1084 (1989)). A copy of the definition is attached. From this definition, a person skilled in the art would have understood the scope of the claim.

5. The recitation of “a labeling reagent holding layer” in claims 15 and 16 is indefinite. The recitation of “a labeling reagent holding layer” does not render the claim indefinite. It is recited as a component of the chromatographic strip, just as the test sample loading area, the absorption layer and reaction layer are recited. None of these components were found to be indefinite. It is respectfully requested that this aspect of the rejection be reconsidered and withdrawn.

In view of the arguments and/or amendments made to the claims, it is respectfully requested that the rejection under 35 U.S.C. § 112, second paragraph, be reconsidered and withdrawn.

In the last Office Action, the Examiner rejected claims 1, 2, 6-9, 15, 16, 18, 22, 23 and 27 under 35 U.S.C. § 102(e) as being anticipated by Kuo et al. (U.S. Patent No. 6,183,972) and rejected claims 3, 4, 10, 12-14, 20 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Kuo in view of Chandler et al. (U.S. Patent No. 6,271,046) and made the rejections final. Claims 5, 6, 9, 11, 12, 14 and 24 have been canceled, thereby rendering the rejection moot with respect to these claims.

Independent claims 1, 15 and 22 have been amended to require that the reaction area covers or is disposed on the whole area of the reactive layer. When the reaction area is limited to a specific location and the degree of coloration level measured is limited to that specific location. The resulting measurement tends to give a large error due to the osmotic activity of the labeling agent employed. This makes it difficult to measure the concentration of the analyte using a numerical expression.

The chromatographic measurement apparatus of the claimed invention makes it possible for quantitative measurements to be conducted with higher sensitivity. There is no longer a need to control the osmosis of the liquid sample and the development of a binding agent. See page 19, lines 17-21 of the specification. When the reaction area is a spot or dot shape and a plurality of spots or dots are disposed over the whole area of the reactive layer, the coloration measurement is a comparison between the spots or dots and areas between the spots or dots where no binding reagent exists. Also, even if there is a variation in coloration in one or more reaction areas due to the influence of osmotic conditions of the liquid sample, the extent of the variation can be reduced by computational processing after measurements have been performed at a plurality of locations on the reactive layer. A coloration reaction occurs in each reaction area. The coloration is measured at the plurality of locations and the measurement results are subjected to computational processing. Therefore, it is possible to obtain more accurate measurement of the concentration of the analyte and more accurate data so as to minimize the influence of the osmotic conditions of the liquid sample. See page 17, lines 25-31 of the specification.

As shown in Fig. 1, the whole reaction layer is measured using an instrument to read an absorption signal of a coloration or an image analysis instrument such as a CCD. See page 16, lines

19-22 of the specification. The term "CCD" is a known term in the art and is an abbreviation for charged-coupled device, which is a high-speed semiconductor used chiefly in image detection. The definition of "CCD" is from The New Oxford Dictionary of English, a copy of which is attached to this preliminary amendment.

The whole area of the reaction layer can be measured at once, or an average value can be obtained after measurements of a plurality of different areas of the whole area. Accordingly, more accurate measurements can be obtained when the reaction areas are formed so as to cover the entire reactive layer. Neither Kuo et al. nor Chandler et al. teach this concept of covering a reaction layer with a plurality of reaction areas and making a plurality of measurements in order to minimize the influence of the osmotic conditions of the liquid sample.

For the foregoing reasons, it is submitted that the claims 1-4, 7, 8, 10, 13, 15, 16, 18, 20-23, 26 and 27 are patentable over the teachings of the prior art relied upon by the Examiner. Accordingly, favorable reconsideration of the claims is requested in light of the preceding amendments and remarks. Allowance of the claims is courteously solicited.


To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including

Application No. 09/743,612

extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT, WILL & EMERY

A handwritten signature in black ink, appearing to read "Cameron K. Weiffenbach". The signature is fluid and cursive, with a large initial 'C' and 'W'.

Cameron K. Weiffenbach  
Registration No. 44,488

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
(202) 756-8000 CKW:jdj  
Facsimile: (202) 756-8087  
**Date: October 14, 2003**



WEBSTER'S  
Ninth New  
Collegiate  
Dictionary



### A GENUINE MERRIAM-WEBSTER

The name *Webster* alone is no guarantee of excellence. It is used by a number of publishers and may serve mainly to mislead an unwary buyer.

A *Merriam-Webster*® is the registered trademark you should look for when you consider the purchase of dictionaries or other fine reference books. It carries the reputation of a company that has been publishing since 1831 and is your assurance of quality and authority.

Copyright © 1989 by Merriam-Webster Inc.

Philippines Copyright 1989 by Merriam-Webster Inc.

Library of Congress Cataloging in Publication Data  
Main entry under title:

Webster's ninth new collegiate dictionary.

Includes index.

I. English language—Dictionaries. I. Merriam-Webster Inc.

PE1628.W5638 1989 423 88-8335

ISBN 0-87779-508-8

ISBN 0-87779-509-6 (indexed)

ISBN 0-87779-510-X (deluxe)

Webster's Ninth New Collegiate Dictionary principal copyright 1983

COLLEGIATE trademark Reg. U.S. Pat. Off.

All rights reserved. No part of this book covered by the copyrights hereon may be reproduced or copied in any form or by any means—graphic, electronic, or mechanical, including photocopying, taping, or information storage and retrieval systems—without written permission of the publisher.

Made in the United States of America

3132333435RMcn89

sheath 2: to plunge or bury (as a sword) in flesh 3: to withdraw (a claw) into a sheath 4: to case or cover with something (as sheets of metal) that protects — sheath-er \shē-ih-ər, -thər/ *n*  
sheath-ling \shē-ih-ling, -thing/ *n* (15c) 1: the action of one that sheathes something 2: material used to sheathe something; *esp*: the first covering of boards or of waterproof material on the outside wall of a frame house or on a timber roof  
sheath knife *n* (1837): a knife having a fixed blade and designed to be carried in a sheath  
shea tree \shē-, shā-/ *n* [Bambara *sɛ*] (1799): a tropical African tree (*Butyrospermum parkii*) of the sapodilla family with fatty nuts that yield Shea butter  
sheave \shiv, shēv/ *n* [ME *sheve*; akin to OE *scēath* sheath] (14c): a grooved wheel or pulley (as of a pulley block)  
sheave \shēv/ *vi* sheaved; sheav-ing \sheə/ (ca. 1598): to gather and bind into a sheaf  
she-bang \shi-'bāŋ/ *n* [perh. alter. of *shebeen*] (ca. 1895): CONTRIVANCE, AFFAIR, CONCERN (in charge of the whole ~)  
She-bat \shə-'bāt-, -vāt/ *n* [Heb *shēbāt*] (ca. 1769): the 5th month of the civil year or the 11th month of the ecclesiastical year in the Jewish calendar — see MONTH table  
she-ben \shə-'bən/ *n* [IrGael *sibin* bad ale] chiefly Irish (1787): an unlicensed or illegally operated drinking establishment  
Shee-chi-nah \shə-'kē-nə-, -kē-nə-, -ki-'nə-/ *n* [Heb *shēkhinah*] (1663): the presence of God in the world as conceived in Jewish theology  
shed \shēd/ *v* shed; shed-ding [ME *sheden* to divide, separate, fr. OE *scēadan*; akin to OHG *scēidan* to separate, L *scindere* to cut, split, Gk *schizein* to split] *vi* (bef. 12c) 1 chiefly *dat*: to set apart: SEGREGATE 2: to cause to be dispersed without penetrating (duck's plumage ~s water) 3 *a*: to cause (blood) to flow by cutting or wounding *b*: to pour forth in drops (~ tears) *c*: to give off in a stream (fish shedding their eggs in spawning) *d*: to give off or out (his book ~s some light on this subject) 4 (1): to cast off (as a body covering): MOLT (2): to let fall (as leaves) (3): to eject (as seed or spores) from a natural receptacle *b*: to rid oneself of temporarily or permanently as superfluous or unwanted ~ *vi* 1: to pour out: SPILL 2: to become dispersed: SCATTER 3: to cast off some natural covering (the cat is shed-ding) *syn* see DISCARD — shed blood: to cause death by violence  
shed *n* (bef. 12c) 1 *obs*: DISTINCTION, DIFFERENCE 2: something (as the skin of a snake) that is discarded in shedding 3: a divide of land  
shed *n* [alter. of earlier *shadde*, prob. fr. ME *shade*] (15c) 1 *a*: a slight structure built for shelter or storage; *esp*: a single-storied building with one or more sides unenclosed *b*: a building that resembles a shed 2 *archaic*: HUT  
shed \shēd-/ *v* shed-ded; shed-ding (1850): to put or house in a shed  
shed \shēd-/ *n* (14c): one that sheds something: as *a*: a crab or lobster about to molt *b*: a newly molted crab  
shed dormer *n* (1948): a dormer with a roof sloping in the same direction as the roof from which the dormer projects  
sheen \shēn/ *adj* [ME *shene*, fr. OE *sciēne*; akin to OE *scēawian* to look — more at *show*] (bef. 12c) 1 *archaic*: BEAUTIFUL 2 *archaic*: SHINING, RESPLENDENT  
sheen *vi* (14c): to be bright: show a sheen  
sheen *n* (1602) 1 *a*: a bright or shining condition: BRIGHTNESS *b*: a subdued glitter approaching but short of optical reflection *c*: a lustrous surface imparted to textiles through finishing processes or use of shiny yarns 2: a textile exhibiting notable sheen — sheeny \shē-nē/ *adj*  
sheep \shēp/ *n*, *pl* sheep often *attrib* [ME, fr. OE *scēap*; akin to OHG *scāf* sheep] (bef. 12c) 1: any of numerous ruminant mammals (genus *Ovis*) related to the goats but stockier and lacking a beard in the male; *specific*: one (*O. aries*) long domesticated *esp*. for its flesh and wool 2 *a*: a timid defenseless creature *b*: a timid docile person; *esp*: one easily influenced or led 3: leather prepared from the skins of sheep: SHEEPSKIN  
sheep-ber-ry \-ber-ē/ *n* (ca. 1814): an often shrubby No. American viburnum (*Viburnum lentago*) with white flowers in flat cymes  
sheep-cote \-kōt-, -kāt/ *n*, chiefly Brit (15c): SHEEPFOLD  
sheep-dip \-dip/ *n* (1865): a liquid preparation of toxic chemicals into which sheep are plunged *esp*. to destroy parasitic arthropods  
sheep-dog \-dōg/ *n* (1774): a dog used to tend, drive, or guard sheep  
sheep rescue *n* (1945): a hardy fine-foliated European perennial grass (*Festuca ovina*) widely used as a lawn grass  
sheep-fold \shēp-'fōld/ *n* (15c): a pen or shelter for sheep  
sheep-herd-er \shēp-'hərd-ər/ *n* (ca. 1871): a worker in charge of sheep *esp*. on open range  
sheep-her-ning \-hərd-īŋ/ *n* (1891): the activities of a worker engaged in tending sheep  
sheep-ish \shē-'pish/ *adj* (13c) 1: resembling a sheep in meekness, stupidity, or timidity 2: embarrassed by consciousness of a fault (~ look) — sheep-ish-ly *adv* — sheep-ish-ness *n*  
sheep-ked \shēp-'ked/ *n* [sheep + ked (sheep ked), of unknown origin] (1925): a wingless bloodsucking dipterous fly (*Melophagus ovinus*) that feeds chiefly on sheep and is a vector of sheep trypanosomiasis — called also *sheep tick*  
sheep laurel *n* (1810): *a*. No. American dwarf shrub (*Kalmia angustifolia*) that is poisonous to young stock and resembles mountain laurel but has narrower leaves and smaller bright red flowers — called also *lambkill*  
sheep's eye *n* (1529): a shy longing usu. amorous glance — usu. used *pl*.  
sheep-shank \shēp-'shāŋk/ *n* (ca. 1627) 1: a knot for shortening a line — see KNOT illustration 2 *Scot*: something of no worth or importance  
sheeps-head \shēps-'hed/ *n* (1643) 1: a marine percoid food fish (*A. chasargus probatocephalus* of the family Sparidae) of the Atlantic and Gulf coasts of the U.S. with broad incisor teeth 2: FRESHWATER DRUM 3: a common largely red or rose California wrasse (*Semioscyphus pulcher*)  
sheep-shear-er \shēp-'shir-ər/ *n* (1539): one that shears sheep  
sheep-shear-ing \shēp-'shir-(ə)-īŋ/ *n* (1607) 1: the act of shearing sheep 2: the time or season for shearing sheep

sheep-skin \ˈʃiːpˌskɪn/ *n* (13c) 1 a : skin of a sheep; also : leather prepared from it b : PARMENT — a garment made of or lined with sheepskin 2 : (DROMY) a small acid dock (*Rumex acetosella*)  
sheep sorrel *n* (1807) a : a pasture or range for sheep  
sheep walk *n*, chiefly Brit (1586) a : pasture or range for sheep  
sheer \ʃiːə(r)/ *adj* [ME *OE scian* to shine] (1568) 1 obs : BRIGHT, SHINING 2 : of very thin or transparent texture : DIAPHANOUS 3 a : UNQUALIFIED, UTTER (very folly) (— ignorance) b : being free from adulterant : PURE, UNMIXED c : viewed or acting in dissociation from all else (won through by determination) d : marked by great steepness *syn* see STEEP — sheer-ly *adv* — sheer-ness *n*  
sheer *adv* (1600) 1 : in a complete manner : ALTOGETHER 2 : straight up or down without a break : PERPENDICULARLY  
sheer *n* (ca. 1920) : a sheer fabric; also : a garment of such a fabric  
sheer *vb* [perh. alter. of *shear*] *vi* (1635) : to deviate from a course : SWERVE — *vt* : to cause to shear  
sheer *n* (1670) 1 : a turn, deviation, or change in a course (as of a ship) 2 : the position of a ship riding to a single anchor and heading toward it  
sheer *n* [perh. alter. of *shear*] (1691) : the fore-and-aft curvature from bow to stern of a ship's deck as shown in side elevation  
sheer-legs \ˈʃiːə(r)-ˈleɪz-, -læɪz/ *n pl* but *sing* or *pl* in constr (1900) : SHEAR L(C2)  
sheet \ˈʃiːt/ *n* [ME *shete*, fr. OE *scēte*; akin to OE *scēotan* to shoot — more at SHOOT] (bef. 12c) 1 a : a broad piece of cloth; esp : a oblong of usu. linen or cotton cloth used as an article of bedding 1 : SAIL 1a(1) 2 a (1) : a usu. rectangular piece of paper; esp : one manufactured for printing (2) : a rectangular piece of heavy paper with a plant specimen mounted on it (an herbarium of 100,000 ~s) : a printed signature for a book esp. before it has been folded, cut, or bound — usu. used in pl. c : a newspaper, periodical, or occasional publication (a gossip ~) d : the unseparated postage stamps printed by one impression of a plate on a single piece of paper; also : a pane of glass 3 : a broad stretch or surface of something (a ~ of ice) 4 : suspended or moving expanse (as of fire or rain) 5 a : a portion of something that is thin in comparison to its length and breadth b : a flat baking utensil of tinne metal (a cookie ~) 6 : a surface or part of a surface in which it is possible to pass from any one point of it to any other without leaving the surface (a hyperboloid of two ~s)  
sheet-like \ˈʃiːt-ˈliːk/ *adj*  
sheet *adj* (1582) 1 : rolled or spread out in a sheet 2 : of, relating to, or concerned with the making of sheet metal  
sheet *vi* (1606) 1 : to cover with a sheet : SHROUD 2 : to furnish with sheets 3 : to form into sheets ~ *vi* : to fall, spread, or flow in a sheet (the rain ~ed against the windows) — sheet-er *n* — sheet home 1 : to extend (a sail) and set as full as possible by hauling upon the sheets 2 : to fix the responsibility for : bring home to one  
sheet *n* [ME *shete*, fr. OE *scēata* lower corner of a sail; akin to OE *scēte*] (114c) 1 : a rope or chain that regulates the angle at which a sail is set in relation to the wind 2 pl : the spaces at either end of an of a boat not occupied by thwart : three sheets to the wind : DRUNK  
sheet anchor *n* (15c) 1 : a large strong anchor formerly carried in the waist of a ship and used as a spare in an emergency 2 : something that constitutes a main support or dependence esp. in danger  
sheet bend *n* (1841) : a bend or hitch used for temporarily fastening a rope to the bight of another rope or to an eye — see KNOT illustration  
sheet-fed \ˈʃiːt-fed/ *adj* (1888) : of, relating to, or printed by a process that prints on paper in sheet form  
sheet glass *n* (1805) : glass made in large sheets directly from the molten glass by making a cylinder and then flattening it  
sheet-*ing* \ˈʃiːt-ɪŋ/ *n* (1711) 1 : material in the form of sheets or slabs for forming into sheets 2 : a lining (as wood or steel) used to support an embankment or the walls of an excavation  
sheet lightning *n* (1829) : lightning in diffused or sheet form due to reflection and diffusion by the clouds and sky  
sheet metal *n* (ca. 1909) : metal in the form of a sheet  
sheet music *n* (1857) : music printed on large unbound sheets of paper  
Sheet-rock \ˈʃiːt-ˈrɒk/ *trademark* — used for plasterboard  
sheikh or sheik \ˈʃeɪk-, ˈræɪk/ *also* \ˈʃæɪk/ *n* [Ar *shaykh*] (1577) 1 : an Arab chief 2 *usu* *sheik* : a man held to be irresistibly attractive to romantic young women  
sheikh-dom or sheik-dom \-dəm, -təm/ *n* (1845) : a region under the rule of a sheikh  
shekel \ˈʃek-el/ *n* [Heb *sheqel*] (15c) 1 a : any of various units of weight; esp : a Hebrew unit equal to about 252 grains or 16.5 g : a unit of value based on a shekel weight of gold or silver 2 : a weighing one shekel 3 pl : MONEY 4 — see MONEY table  
Shekhinah *var* of SHECHINAH  
shel-drake \ˈʃel-dræk/ *n* [ME, fr. *sheld*- (akin to MD *schilled* to color) + *drake*] (14c) 1 : SHELDUCK 2 : MERGANSER  
shel-druck \ˈʃel-drʌk/ *n* [shel- (as in *sheldrake*) + *duck*] (1707) : any of the Old World ducks (genus *Tadorna*); esp : a common mostly black and-white European duck (*T. tadorna*) slightly larger than the mallard  
shelf \ˈʃelf/ *n*, *pl* shelves \ˈʃelvz/ [ME, prob. fr. OE *scylfe*; akin to *scalpere*, *scalpere* to carve, OE *sciefl* shelf] (bef. 12c) 1 a : a thin, scalped, narrow piece of material (as wood) fastened horizontally (as on a wall) at a distance from the floor to hold objects b : a several similar pieces in a closet, bookcase, or similar structure c : contents of a shelf 2 : something resembling a shelf in form or position as : a sandbank or ledge of rocks usu. partially submerged : a stratum with a shelflike surface c : a flat projecting layer or ledge : a submerged border of a continent or island : CONTINENTAL shelf-ful \ˈʃelf-ˈfʊl/ *n* — shelf-like \ˈʃel-f-ˈliːk/ *adj* — off the shelf : available from stock : not made to order (off the shelf equipment) : on the shelf : in a state of inactivity or uselessness  
shelf life *n* (1914) : an extensive ice sheet originating on land but extending out to sea beyond the depths at which it rests on the seabed  
shelf life *n* (1927) : the period of time during which a material can be stored and remain suitable for use  
shelf \ˈʃelf/ *n* [ME, fr. OE *sciefl*; akin to OE *scēadu* shell, ON *silix* pebble, flint, Gk *skallein* to hoe] (bef. 12c) 1 a : a hard or pebbly, calcareous covering of an animal b : the hard or

outer covering of an egg e  
covering or outside part o  
: shell material (as of moll  
things that resembles a she  
esp : a building with an  
outside covering (<the  
(mere effigies and ~s of  
for holding a filling (a pa  
domed roof that is used i  
glass 5 : a thin hard la  
: an impersonal attitude  
sence of feeling 8 : a na  
more persons pulling o  
the orbits of a group of e  
rounding the nucleus of a  
attaining an explosive burst  
holds the charge of powder  
small arms 11 : a plain  
~shelly /'shel-ə/ *adj*  
shell w (1562) 1 : a : to  
shell, husk, pod, or capsu  
of (as an ear of Indian cor  
2 : to throw shells at, up  
against (as opposing p  
off in thin piece 2 : to c  
the pod or husk (nuts with  
a beach) : collect shells  
shell' /'ʃel-/ *l*, shiil : she  
shell' /'ʃel-/ *l*, shiil : she  
shell-lack /'ʃel-'lak/ n ['ʃel-  
pared in thin orange or yel  
bleached white 2 : a prej  
used chiefly as a wood fill  
ing shellac used for makin  
phonograph record  
shellac w /'ʃel-lacked/; she  
treat with shellac or a shell  
shell-lack-ing n (1938) : a de  
shell-back /'ʃel-'bak/ n (18  
shell bean n (1868) 1 : a  
compare SNAP BEAN 2 : th  
shell-cracker /'ʃel-'krak-ə/  
shelled /'ʃel-d/ *adj* (1577)  
often used in combination  
the shell removed (~ oyst  
corn)  
shell-fish /'ʃel-ər-ɪ/ n (1694)  
that collects seashells  
shell-fish /'ʃel-/ n (bef. 11  
shell; esp : an edible mollu  
shell-fish-ry /'ʃel-(ə-)rē/  
tion of shellfish  
shell game n (1890) 1 : th  
2 : FRAUD; esp : a swindle  
little or no value for a valu  
shell jacket n (1840) 1 : a  
the front 2 : MESS JACKET  
shell out vb (1801) : PAY  
shell pink n (1887) : a varia  
shell-proof /'ʃel-'pru:f/ *ad*  
bombs  
shell shock n (1916) : any  
conditions appearing in sol  
shell-shocked *adj* (1918)  
confused, upset, or exhaust  
shell steak n (1971) : the  
tenderloin  
shell-work /'ʃel-'wɜ:k/ n (6  
posed of a pattern of shells  
shell-ter /'ʃel-tər/ n [ori  
covers or affords protectio  
being covered and protecte  
shell-ter vb shell-tered; shell-t  
or provide a shelter for :  
under shelter or protection  
take shelter ~ shell-ter-er  
shell-ter-belt /'ʃel-tər-'belt/  
protects (as crops) from wi  
shell-ter half n (1942) : one c  
shell-ter tent n (ca. 1875) :  
changeable pieces of wat  
fitted together for use  
shell-ty or shell-tie /'ʃel-tē/  
ON /Hjalti Shetlander/ (I  
SHEEPDOG  
shelve /'ʃel-v/ vb shelled; s  
shelves 2 : to place on a  
b : to put off or aside (~ :  
a shelf ~ shelve-er n  
shelving /'ʃel-vɪŋ/ n (168  
sloping surface or place  
shelving n (1844) 1 : mat  
Shem /'ʃem/ n [Heb Shem]  
progenitor of the Semitic p  
Shema /'ʃe-mə/ n [Heb :  
the Jewish confession of  
Mid Num 15:37-41  
Shem-ai Atze-reth /'ʃe-  
shem-ai, fr. Heb shem-ai  
Jewish festival following t  
Shema prayer for seasonal  
Shem-ite /'ʃem-ɪt/ n [She  
Shem-it /'ʃem-ɪt-ɪʃ/ n Shem-  
Shem-it-gan /'ʃe-'nan-i-gan/  
trick ~ used esp. for an un



# *The* **NEW** **OXFORD** *Dictionary of* **ENGLISH**

**The foremost authority—the most comprehensive coverage of current English**

**Maximum accessibility—with a revolutionary new entry style**

***New Oxford  
New English***

***The World's Most Trusted Dictionaries***

**cave bear** ► noun a large extinct bear of the Pleistocene epoch, whose remains are found commonly in caves throughout Europe.

• *Ursus spelaeus*, family Ursidae.

**cave cricket** ► noun another term for **CAMEL CRICKET**.

**cave-dweller** ► noun a caveman or cavewoman.

**cavefish** ► noun (pl. same or **-fishes**) a small colourless fish which lives only in limestone caves in North America. It has reduced or absent eyes, and the head and body are covered with papillae which are sensitive to vibration.

• Family Amblyopsidae: four genera, in particular *Amblyopsis* and *Typhlichthys*.

**cave-in** ► noun a collapse of a roof or similar structure, typically underground: a mine cave-in.

■ [in sing.] figurative an instance of yielding or submitting under pressure: the government's cave-in to industry pressure.

**Cavell** /'kav(ə)l/, Edith (Louisa) (1865–1915), English nurse. During the First World War she helped Allied soldiers to escape from occupied Belgium. She was subsequently executed by the Germans and became a heroine of the Allied cause.

**caveman** ► noun (pl. **-men**) a prehistoric man who lived in caves.

■ a man whose behaviour is uncivilized or violent: [as modifier] you can't change my mind by caveman tactics.

**Cavendish** /'kav(ə)ndɪʃ/, Henry (1731–1810), English chemist and physicist. He identified hydrogen, studied carbon dioxide, and determined their densities relative to atmospheric air. He also established that water is a compound, and determined the density of the earth.

**cavendish** /'kav(ə)ndɪʃ/ ► noun [mass noun] tobacco softened, sweetened, and formed into cakes.

– ORIGIN mid 19th cent.: probably from the surname Cavendish.

**cave painting** ► noun a prehistoric picture on the interior of a cave, often depicting animals.

**cavern** /'kav(ə)n/ ► noun a cave, or a chamber in a cave, typically a large one.

■ used in similes and comparisons to refer to a vast, dark space: a dark cavern of a shop.

– ORIGIN late Middle English: from Old French *caverne* or from Latin *caverna*, from *cavus* 'hollow'. Compare with **CAVE**.

**cavernous** ► adjective like a cavern in size, shape, or atmosphere: a dismal cavernous hall.

■ figurative giving the impression of vast, dark depths: his cavernous eyes.

– DERIVATIVES **cavernously** adverb.

– ORIGIN late Middle English: from Old French *cavernieux* or Latin *cavernosus* (from *caverna* 'cavern').

**cave salamander** ► noun a cave-dwelling salamander with pinkish to brown skin.

• Several genera and species in the family Plethodontidae, including the North American *Eurycea lucifuga* and the European genus *Hydromantes*.

**cavesson** /'kavis(ə)n/ ► noun (also **lunging cavesson**) a type of heavy bridle, which lacks a bit and has a thick noseband fitted with rings to which a lunge rein may be attached.

■ (also **cavesson noseband**) a simple noseband on a horse's bridle, which does not affect the action of the bit or bridle.

– ORIGIN late 16th cent.: from French *caveçon*, Italian *cavezzone*, based on Latin *caput* 'head'.

**cavewoman** ► noun (pl. **-women**) a prehistoric woman who lived in caves.

**caviar** /'kavia:, 'kav'i:ə/ (also **caviare**) ► noun [mass noun] the pickled roe of sturgeon or other large fish, eaten as a delicacy.

– PHRASES **caviar to the general** a good thing unappreciated by the ignorant.

– ORIGIN mid 16th cent.: from Italian *caviare* (earlier *caviaro*) or French *caviar*, probably from medieval Greek *khaviari*.

**cavil** /'kav(ə)l/ ► verb (cavilled, cavilling; US caviled, caviling) [no obj.] make petty or unnecessary objections: they cavilled at the cost.

► noun an objection of this kind.

– DERIVATIVES **caviller** noun.

– ORIGIN mid 16th cent.: from French *caviller*, from Latin *cavillari*, from *cavilla* 'mockery'.

**caving** ► noun [mass noun] the sport or pastime of exploring caves.

**cavitation** /'kavi'teɪʃ(ə)n/ ► noun [mass noun] Physics the

formation of an empty space within a solid object or body.

■ the formation of bubbles in a liquid, typically by the movement of a propeller through it.

**cavity** ► noun (pl. **-ies**) an empty space within a solid object, in particular the human body: the abdominal cavity.

■ a decayed part of a tooth.

– DERIVATIVES **cavitory** adjective.

– ORIGIN mid 16th cent.: from French *cavité* or late Latin *cavitas*, from Latin *cavus* 'hollow'.

**cavity wall** ► noun a wall formed from two thicknesses of brickwork or blockwork with a space between them.

**cavort** ► verb [no obj.] jump or dance around excitedly: the players cavorted about the pitch.

■ informal apply oneself enthusiastically to sexual or disreputable pursuits: he spent his nights cavorting with the glitterati.

– ORIGIN late 18th cent. (originally US): perhaps an alteration of **CURVET**.

**Cavour** /kə'vu:ə/, Camillo Benso, Conte di (1810–61), Italian statesman. A supporter of Italian unification under Victor Emmanuel II, he was Premier of Piedmont (1852–59; 1860–1), and in 1861 became the first Premier of a unified Italy.

**cavy** /'keɪv/ ► noun (pl. **-ies**) a South American rodent with a sturdy body and vestigial tail.

• Family Caviidae: five genera and several species, in particular the guinea pig. The Patagonian cavy is the mara.

– ORIGIN late 18th cent.: from modern Latin *cavia*, from Galibi *cabiai*.

**caw** ► noun the harsh cry of a rook, crow, or similar bird.

► verb [no obj.] utter such a cry.

– ORIGIN late 16th cent.: imitative.

**Cawley** /'kɔ:li/, Evonne (Fay) (b.1951), Australian tennis player; born Evonne Fay Goolagong. She won two Wimbledon singles titles (1971; 1980) and was three times Australian singles champion (1974–6).

**Cawnpore** /kɔ:n'pɔ:/ variant spelling of **KANPUR**.

**Caxton**, William (c.1422–91), the first English printer. He printed the first book in English in 1474 and went on to produce about eighty other texts, including editions of *Le Morte d'Arthur* and *Canterbury Tales*.

**cay** /keɪ, ki:/ ► noun a low bank or reef of coral, rock, or sand, especially one on the islands in Spanish America. Compare with **KEY**.

– ORIGIN late 17th cent.: from Spanish *cayo* 'shoal, reef', from French *quai* 'quay'.

**Cayenne** /keɪ'en/ the capital and chief port of French Guiana; pop. 41,600 (1990).

**cayenne** /keɪ'en/ (also **cayenne pepper**) ► noun [mass noun] a pungent hot-tasting red powder prepared from ground dried chilli peppers.

– ORIGIN early 18th cent.: from Tupi *kynha*, *qutynha*, later associated with **CAYENNE**.

**Cayley** /'keɪli/, Arthur (1821–95), English mathematician and barrister. He wrote almost a thousand mathematical papers, including articles on determinants, group theory, and the algebra of matrices. The **Cayley numbers**, a generalization of complex numbers, are named after him.

**Cayley** /'keɪli/, Sir George (1773–1857), British engineer, the father of British aeronautics. He is best known for his understanding of the principles of flight and for building the first manned glider, which was flown in 1853. He was also a founder of the original Polytechnic Institution.

**cayman** ► noun variant spelling of **CAIMAN**.

**Cayman Islands** /'keɪmən/ (also **the Caymans**) a group of three islands in the Caribbean Sea, south of Cuba; pop. 31,930 (est. 1994); official language, English; capital, George Town. The Cayman Islands are a British dependency.

**Cayuga** /'keɪju:ɡə, 'kai-/ ► noun (pl. same or **Cayugas**) 1 a member of an American Indian people, one of the five of the original Iroquois confederacy, formerly inhabiting part of New York State.

2 (mass noun) the extinct Iroquoian language of this people.

► adjective of or relating to this people or their language.

– ORIGIN from an Iroquoian place name.

**Cayuse** /'kaiju:s/ ► noun (pl. same or **Cayuses**) 1 a

member of an American Indian people of Washington State and Oregon.

2 (mass noun) the extinct Penutian language of this people.

3 (**cayuse**) an American Indian pony.

■ N. Amer. informal a horse.

► adjective of or relating to this people or their language.

– ORIGIN the name in Chinook Jargon.

**CB** ► abbreviation for ■ Citizens' Band (radio frequencies). ■ (in the UK) Companion of the Order of the Bath.

**CBC** ► abbreviation for Canadian Broadcasting Corporation.

**CBE** ► abbreviation for (in the UK) Commander of the Order of the British Empire.

**CBI** ► abbreviation for Confederation of British Industry.

**CBS** ► abbreviation for (in the US) Columbia Broadcasting System.

**CC** ► abbreviation for ■ Brit. City Council. ■ Companion of the Order of Canada. ■ Brit. County Council. ■ Brit. County Councillor. ■ Cricket Club.

**cc** (also **c.c.**) ► abbreviation for ■ carbon copy (used as an indication that a duplicate has been or should be sent to another person). ■ cubic centimetres).

**CCD** Electronics ► abbreviation for charge-coupled device, a high-speed semiconductor used chiefly in image detection.

**CKK** Biochemistry ► abbreviation for cholecystokinin.

**CCTV** ► abbreviation for closed-circuit television.

**CD** ► abbreviation for ■ civil defence. ■ compact disc. ■ corps diplomatique.

**Cd** ► symbol for the chemical element cadmium.

**Cd.** ► abbreviation for (in the UK) Command Paper (third series, 1900–18).

**cd** ► abbreviation for candela.

**CDC** ► abbreviation for ■ (in the US) Centers for Disease Control. ■ Commonwealth Development Corporation.

**CD-I** ► abbreviation for compact disc (interactive).

**CDN** ► abbreviation for Canada (international vehicle registration).

**cDNA** ► abbreviation for complementary DNA.

**Cdr** ► abbreviation for (in the navy or air force) Commander.

**Cdre** ► abbreviation for Commodore.

**CD-ROM** ► noun a compact disc used as a read-only optical memory device for a computer system.

– ORIGIN 1980s: acronym from *compact disc read-only memory*.

**CDT** ► abbreviation for ■ Central Daylight Time (see **CENTRAL TIME**). ■ craft, design, and technology, a subject taught in schools in the UK.

**CD video** (abbrev. **CDV**) ► noun [mass noun] a video system in which both sound and picture are recorded on compact disc.

**CE** ► abbreviation for ■ Church of England. ■ civil engineer. ■ Common Era.

**Ce** ► symbol for the chemical element cerium.

**ceanothus** /si:'nəʊθəs/ ► noun a North American shrub which is cultivated for its dense clusters of small, typically blue, flowers.

• Genus *Ceanothus*, family Rhamnaceae.

– ORIGIN modern Latin, from Greek *keanōthos*, denoting a kind of thistle.

**Ceará** /seɪ'rɑ:/ a state in NE Brazil, on the Atlantic coast; capital, Fortaleza.

**cease** ► verb [no obj.] come to an end: the hostilities had ceased and normal life was resumed | [with infinitive] on his retirement the job will cease to exist.

■ [with obj.] bring (a specified action) to an end: they were asked to cease all military activity.

– PHRASES **never cease to** (in hyperbolic use) do something very frequently: her exploits never cease to amaze me. **without cease** without stopping.

– ORIGIN Middle English: from Old French *cesser*, from Latin *cessare* 'stop', from *cedere* 'to yield'.

**ceasefire** ► noun a temporary suspension of fighting, typically one during which peace talks take place; a truce.

■ an order or signal to stop fighting.

**ceaseless** ► adjective constant and unending: the fort was subjected to ceaseless bombardment.

– DERIVATIVES **ceaselessly** adverb.

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☒ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**